

CLAIMS

1. A raster image processor comprising:
a processor to parse a print ready file;
5 a rasterizer to translate the parsed print ready file to an intermediate file;
and
a compressor to translate the intermediate file to an embedded bit-stream.
2. The raster image processor of claim 1, wherein the print ready file
10 comprises a print description language file.
3. The raster image processor of claim 1, wherein the print ready file
comprises a display list.
- 15 4. The raster image processor of claim 1, wherein the intermediate
file comprises a page strip.
5. The raster image processor of claim 1, wherein the embedded bit-
stream comprises a progressively encoded compressed image.
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6. The raster image processor of claim 1, wherein the embedded bit-
stream comprises an image-chain.
7. The raster image processor of claim 1, further comprising a
25 decompressor to decompress the embedded bit-stream.

8. The raster image processor of claim 1, wherein the embedded bit-stream is stored in a recordable medium.

9. A printer device comprising:

- 5 a processor to parse a print ready file;
a rasterizer to translate the parsed print ready file to an intermediate file;
a compressor to translate the intermediate image file to an embedded bit-stream;
a decompressor to decompress the embedded bit-stream; and
10 a print engine to render an image from the decompressed embedded bit stream.

10. The printer device of claim 9 further comprising a memory to store the embedded bit-stream prior to decompression.

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11. The printer device of claim 9, wherein the embedded bit-stream comprises a progressively encoded compressed image.

12. The printer device of claim 9, wherein the embedded bit-stream
20 comprises an image-chain.

13. A rasterizer comprising:

- a processor;
a memory to store a display list file;
25 a rasterization module to create raster data in the display list file; and
a compressor to compress the raster data into one or more embedded bit streams.

14. The rasterizer of claim 13, wherein the compressor is configured to complete compression into the one or more embedded bit-streams whenever a predetermined threshold is met.

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15. The rasterizer of claim 13, wherein the compressor is configured to compress the one or more embedded bit streams to include a set of quality blocks and a quality block is dropped from each of the one or more embedded bit-stream when a predetermined threshold is met.

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16. The rasterizer of claim 13, wherein the compressor is configured to compress the one or more embedded bit streams to include a set of quality blocks and a quality block is dropped from a longest embedded bit-stream of the one or more embedded bit-streams when a predetermined threshold is met.

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17. The rasterizer of claim 13, wherein the compressor is configured to compress the one or more embedded bit stream to include a set of quality blocks and a quality block based on a predetermined metric is dropped from a set of embedded bit-streams when a predetermined threshold is met.

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18. The rasterizer of claim 17, wherein the predetermined metric is based on a signal to noise ratio.

19. The rasterizer of claim 17, wherein the predetermined metric is
25 based on visual quality.

20. A method of compressing print data comprising:
determining a threshold of a printing device resource;
receiving an intermediate image file;
translating the intermediate image file to data described by a progressive
5 encoding technique;
selectively dropping quality information from the data when the threshold
of a printing device resource is met.

21. The method of claim 20 wherein the data described by a
10 progressive encoding technique comprises embedded bit-streams.

22. The method of claim 21, wherein dropping quality information is
performed by dropping a quality block from each of the embedded bit-streams
when the threshold of the printing device resource is met.

15 23. The method of claim 21, wherein dropping quality information is
performed by dropping a quality block from a longest embedded bit-stream of
the embedded bit-streams when the threshold of the printing device resource is
met.

20 24. The method of claim 21, wherein dropping quality information is
performed by dropping a quality block based on a predetermined metric from
each of the embedded bit-streams when the threshold of the printing device
resource is met.

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25. The method of claim 20, further comprising completing translating the intermediate file when the threshold of the printing device resource is met.

26. The method of claim 20, wherein the intermediate image file
5 comprises a page strip.

27. The method of claim 20, wherein the embedded bit-stream comprises an image chain.

10 28. An embedded bit-stream compressor comprising:
means for receiving an intermediate image file;
means for translating the intermediate image file to embedded bit-streams;
means for selectively dropping quality information from the embedded
bit-streams when a predetermined threshold of a printing device resource is met.

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29. The embedded bit-stream compressor of claim 28 wherein the means for translating the intermediate image file includes a means for completing translating when the predetermined threshold of the printing device resource is met.

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30. The embedded bit-stream compressor of claim 28 further comprising means for storing the embedded bit-streams to a recordable medium.

31. A computer program product, encoded in computer readable
25 media, comprising:

a first set of instructions, executable on a computer system, configured to receive an intermediate image file;

a second set of instructions, executable on the computer system, configured to translate the intermediate image file to embedded bit-streams; and

a third set of instructions, executable on the computer system, configured to drop quality information from the embedded bit-streams when a
5 predetermined threshold of a printing device resource is met.

32. The computer program product of claim 36 further comprising:

a fourth set of instructions, executable on the computer system, configured to store the embedded bit-streams on recordable media.

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33. The computer program product of claim 31, wherein the second set of instructions translates the intermediate file when the predetermined threshold of the printing device resource is met.

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34. The computer program product of claim 31, wherein the third set of instructions drop quality by dropping a portion of quality information from each of the embedded bit-streams when the predetermined threshold of the printing device is met.

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35. The computer program product of claim 31, wherein the third set of instructions drop quality information by dropping a portion of quality information from a longest embedded bit-stream of the embedded bit-streams when the predetermined threshold of the printing device is met.

36. The computer program product of claim 31, wherein the third set of instructions drop quality information by dropping a portion of quality information based on a predetermined metric from each of the embedded bit-streams when the predetermined threshold of the printing device is met.